

REQUEST FOR PROPOSALS

LTRC Project No. 10-3SS

Automatic Enforcement and Highway Safety

PROBLEM STATEMENT

Enforcement promotes safety but the traditional method of implementing it through traffic officers is expensive and difficult due to the complexities of enforcement at heavily trafficked intersections. Budget constraints limiting the number of officers available for traffic enforcement are also an issue. To counter this, automatic enforcement devices such as cameras can provide enforcement at lower cost and with a minimal amount of direct police involvement. However, the application of automatic enforcement has generated some public opposition which inhibits its use. If automatic enforcement is to be continued where it has been implemented, and implemented in new areas to an increasing extent in the future, aspects of its operation that generate opposition from the public must be understood and addressed and the public educated in the purpose, function and benefits of the program.

Since automatic enforcement can be used in a variety of applications (e.g. speeding, red light running, tailgating, right turn on red, yielding to pedestrians, seatbelt use, cell phone texting, truck lane restrictions, keep right except to pass, insurance, registration, license, inspection) and public reaction to its use in each application may be different, a particular application should be selected to initiate study of the subject in this study. The objectives below have been compiled for red light running, but the researcher may choose any application area in automatic enforcement that is important to road safety in Louisiana.

RESEARCH OBJECTIVES

The research objectives of this study are to:

1. Identify aspects of the automatic detection of red light running that the public find offensive or problematical and quantify the level of opposition on each aspect.
2. Identify the aspects of automatic detection of red light running that the public support, and quantify the level of support on each aspect.
3. Quantify the safety impact of automatic enforcement versus traditional enforcement in countering red light running
4. Develop alternative policies and strategies aimed at addressing public concerns of automatic enforcement of red light running.
5. Conduct an economic evaluation of implementing automatic enforcement applying the alternative policies and strategies, versus applying traditional enforcement
6. Develop recommended practices
7. Document results and recommendations

SCOPE

The research is restricted to the study of automatic camera enforcement of red light running in Louisiana, or the application of automatic enforcement to another acceptable area of enforcement by camera. The research will focus on public opinion and safety

effectiveness of existing automatic enforcement systems currently in operation in Lafayette, Baton Rouge, Jefferson Parish, and Orleans Parish.

RESEARCH APPROACH

Task 1: Literature Review

Conduct a literature review on the subject. Also establish current practice by communicating with practitioners and identifying current research directions by reviewing records of research in progress and by communicating with leading researchers in the field.

Task 2: Data collection

Identify and acquire data on the observed safety impact of automatic enforcement of red light running. Data is available from Lafayette Consolidated Government but the research team is expected to obtain data from applications in Baton Rouge, and in Jefferson and Orleans parishes as well. If existing data sources are inadequate, the research team is expected to design a data collection exercise to collect the necessary data. Identify existing attitudinal (opinion) data on automatic enforcement of red light running that may exist.

Task 3: Develop a survey to identify and measure opposition to automatic enforcement of red light running

Develop a survey that allows participants to identify the aspects of automatic enforcement of red light running that they support or oppose. The survey must be conducted in areas where automatic enforcement is or has been used. The survey must allow participants to indicate their degree of approval or disapproval of each aspect.

Task 4: Develop alternative policies and strategies

After identifying the controversial and supported aspects of automatic enforcement of red light running as currently practiced, develop alternative policies and strategies that address the problems and exploit the positive aspects of current practice. The study team can use the Project Review Committee of the project as a sounding board for candidate ideas.

Task 5: Evaluate the alternatives

The study team must evaluate both the quantitative and qualitative aspects of the alternative policies and strategies. The “do-nothing” alternative must be included among the alternatives to reflect the alternative of not introducing any automatic enforcement and relying on traditional enforcement by law enforcement officers.

Task 6: Develop recommended procedure

Develop a recommended procedure and draw up a plan to implement it at a test site where camera enforcement is currently in use and its public opposition and acceptance and safety performance can be monitored.

Task 7: Prepare Progress and Final Reports

Progress will be reported to the Project Review Committee (PRC) every six months after commencement of the project or at the discretion of the PRC. Progress will be reported in audio-visual presentation to the PRC. A final report must be submitted to LTRC three months before the end of the project. The results of the study must be presented in an audio-visual presentation to the PRC before the end of the project

SPECIAL NOTES

- A. Task descriptions are intended to provide a framework for conducting the research. LTRC is seeking the insight of proposers on how best to achieve the research objectives. Proposers are expected to describe research plans that can realistically be accomplished within the constraints of available funds and contract time. Proposals must present the candidate's current thinking in sufficient detail to demonstrate their understanding of the problem and the soundness of their approach.
- B. The proposal shall include travel to LTRC as necessary to meet with the Project Review Committee and statewide for conduct of the research. Out of state travel for the conduct of the research shall be identified in the proposal. Funding shall not be included for travel to conferences for presentation of results. Principal Investigators may request support for conference travel funding outside the project budget.
- C. LTRC projects are intended to produce results that will be applied in practice. It is to be expected that an implementation plan for moving the results of the research into practice will evolve as a concerted effort during this project. The final report must contain an implementation plan to include as a minimum, the following:
 - a. The "product" expected from the research;
 - b. A realistic assessment of impediments to successful implementation;
 - c. The activities necessary for successful implementation;
 - d. The criteria for judging the progress and consequences of implementation.
- D. To assist in the implementation process, the investigators of this research shall be prepared to present the final results to LaDOTD officials in an oral presentation to be held in Baton Rouge LaDOTD Headquarters after acceptance of the final report.

CONTRACT TIME

24 months (include three months allowed for final report review)

COST

\$130,000

AUTHORIZATION TO BEGIN WORK

October 18, 2010

PROPOSAL FORMAT

All proposals must be formatted according to LTRC Research Manual, 2003 edition (http://www.ltrc.lsu.edu/pdf/research_man03.pdf).

PROPOSAL SELECTION

The Project Review Committee selected for this project will review, evaluate and rank all proposals received according to the criteria listed in the proposal review form shown in figure 2-6 in the LTRC Research Manual

DEADLINE FOR RECEIPT OF PROPOSAL

September 1, 2010, 4.00 p.m.

SUBMISSION OF PROPOSAL

An electronic copy of the proposal must be submitted to:

Mr. Harold R. Paul, P.E.

Director

Louisiana Transportation Research Center

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CONTACT PERSON

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